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October 1, 2003

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Marlene H Dortch
Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

Re Notice of Ex Parte Presentation: *In the Matter of AT&T Corp. Petition for Rulemaking To Reform Regulation Of Incumbent Local Exchange Carrier Rates For Interstate Special Access Services*, RM Docket No. 10593.

Dear Ms Dortch;

On Tuesday, September 30, 2003, the Special Access Reform Coalition (SPARC) met with Jessica Rosenworcel and Paul Margie of Commissioner Copps' office to discuss special access pricing SPARC members attending the meeting included: Douglas Brandon of AT&T Wireless; Brian Moir of Moir & Hardman, counsel for eTUG; Douglass Jarrett of Keller and Heckman, counsel for the American Petroleum Institute, Patrick Merrick of AT&T Corp.; Hank Hultquist of MCI, Michale Pryor of Mintz Levin, counsel for AT&T Wireless; Jonathan Lee of Comptel; Marc Martin of Kirkpatrick & Lockhart, counsel for Nextel and Cathy Slesinger of Cable & Wireless - USA During the meeting, SPARC members urged the bureau to immediately address the current inflated special access rates and take immediate action consistent with SPARC's May 1, 2003 ex parte. The attached documents were provided and discussed at the meeting as were some materials already part of the record in this proceeding.

Consistent with the Commission rules, I am filing two copies of this notice and request that one be placed in the record of the proceeding.

Sincerely,

B. R. M.

Brian R Moir, Partner
Moir & Hardman
(202) 331-9852

0+2

Attachments

CC Meeting Attendees

SPARC Members

API (American Petroleum Institute)

AT&T Corp.

AT&T Wireless

Cable & Wireless

Comptel (The Competive Telecommunications Association)

E-TUG (E-Commerce & Telecommunications User Group)

MCI

Nextel Communications

ITAA (Information Technology Association of America)

Global Crossing

EXCESSIVE SPECIAL ACCESS CHARGES DRAIN U.S. ECONOMY

What is Special Access Service?
Special access services are the essential high capacity, dedicated lines that connect a customer's location directly to a service provider's facilities without going through a local exchange company's switch. Over 90% of the special access services in the United States is provided by incumbent local exchange carriers, such as Verizon and SBC. Special access is used primarily by business customers, government agencies, and communications providers, including wireless service providers, broadband service providers and Internet Service Providers, for phone service, data transmission and Internet service. Because of the continued growth in Internet traffic and data transmission services, the demand for special access services is substantial

What's the Issue Surrounding Special Access?
Acting on the expectation of competition in the special access marketplace, the FCC in August 1999 freed the incumbent Bell telephone companies from price cap regulations for special access services. The Bells said they would reduce special access prices in response to competition, but prices have not declined, they have risen in many areas. This during a period of time when telecommunications costs have been greatly reduced. The Bell's own figures filed at the FCC show they are now earning nearly a 40 percent return on special access services

Year	ILEC's Special Access Rate of Return
2000	29.3 percent
2001	38 9 percent
2002	39 7 percent

In October 2002, AT&T asked the FCC to review the special access rules in light of recent experience. In May 2003, the Special Access Reform Coalition (SPARC) of special access customers and their telecommunications providers formally urged the FCC to take up the AT&T request. So far, the FCC has ignored this request.

What's the Impact of High Special Access Prices?
Excessive special access prices are depriving the U.S. economy of necessary investment capital and stifling job creation.

A recent economic study released on June 12, 2003, places the Bells' excess special access profits at $5.6 billion It said rolling back Bell company returns to a conservative 11.25% rate (industry comments in more recent FCC proceedings indicate that returns of 8 5% or even 8.2% would be appropriate given current interest rates and economic conditions) would create 132,000 jobs and add $14.5 billion to the U S economy in the first two years after prices decline.

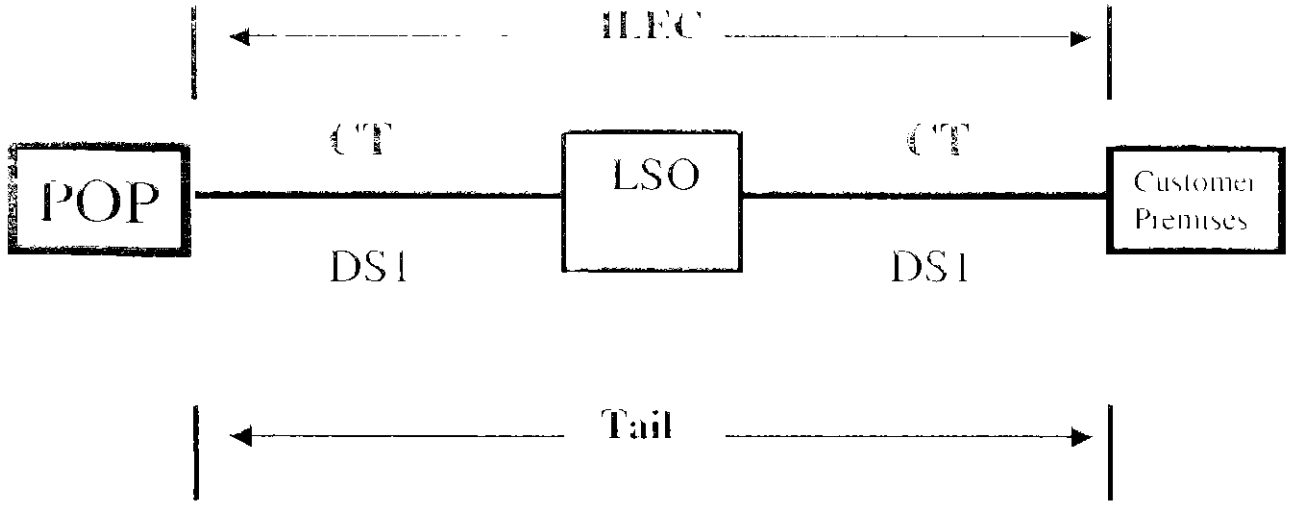
What Should the FCC Do?
The FCC should immediately institute a rulemaking proceeding to review special access rates and to restore reasonable rates of return in the absence of a competitive market.

In the interim, the Commission should immediately restore price cap regulation for special access service until a full review is complete It also should place a moratorium on all new Bell petitions for pricing flexibility

Special Access Architectures

A: Stand alone DS1 w/0 Mileage (only 1 LSO)

- DS1 Tail: POP to Customer Premise
- ILEC Access
- 0 Mileage



Access Elements (red)
- "2" Channel Termination

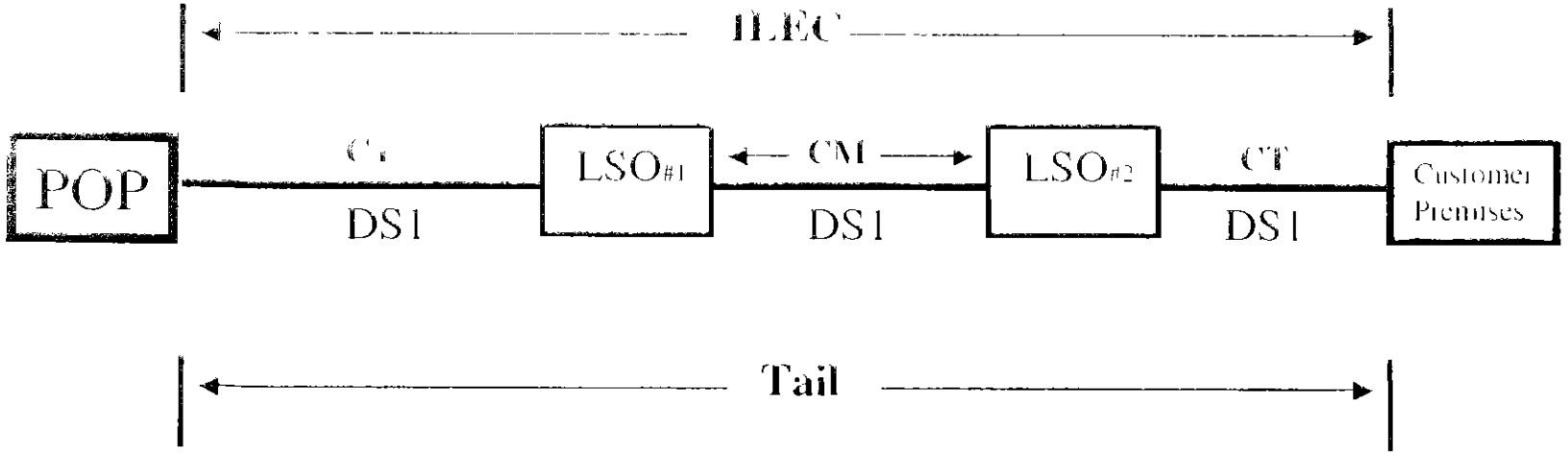
Access Service (black)
- **DS1** High Capacity 1.544 Mpps (24 DS0 channels)

ILEC Access (blue)

Special Access Architectures

B. Stand alone DS1 w/LSO to LSO Mileage

- DS1 Tail: POP to Customer Premise
- ILEC Access
- "X" Mileage



Access Elements (red)
- CT Channel Termination
- CM Channel Mileage (Fixed & per Mile)

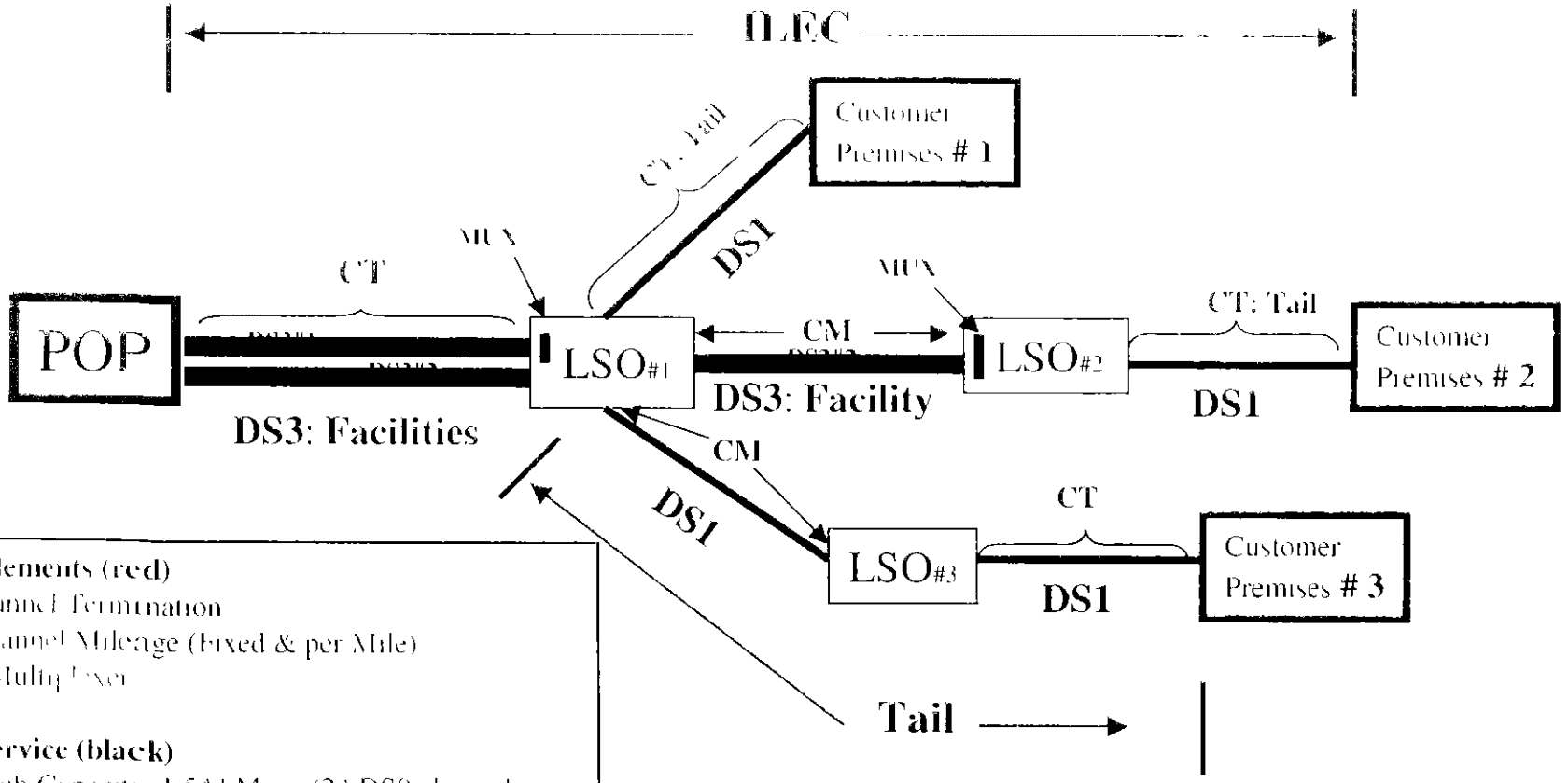
Access Service (black)
- DS1 High Capacity 1.544 Mpps (24 DS0 channels)

ILEC Access (blue)

Special Access Architectures

CT DS3 Facilities and DS1 Tails

- DS3 Facilities: POP to LSO
- DS1 Tail: LSO to Customer Premises
- All ILEC Access
- Zero Mileage and "X" Mileage



Access Elements (red)
- **CT** Channel Termination
- **CM** Channel Mileage (Fixed & per Mile)
- **MUX** Multiplexer

Access Service (black)
- **DS1** High Capacity 1.544 Mpps (24 DS0 channels)
- **DS3** High Capacity 44.736 Mbps (28 DS1s, 672 DS0s)

ILEC Access (blue)

Bell Special Access Rates of Return

	2001	2002
BellSouth	**49.3%**	**56.6%**
Qwest	**46.6%**	**NA***
SBC	**54.6%**	**51.3%**
Verizon	**21.7%**	**23.2%**
Verizon (excluding NYNEX)	**37.1%**	**40.0%**

These rates of return were calculated from 2001 ARMIS 43-01, Table I, Cost and Revenue Table, Column S, Rows 1910 and 1915

* Due to Qwest's financial difficulties, Qwest has been permitted to late file its ARMIS data for 2002 on Sept. 18, 2003.

Special Access Rate Comparisons
Price Flex vs. Price Cap % Increases

	DS1	DS3
Ameritech*	8.2-11.6%	14.1-15.0%
BellSouth	6.0%	29.7%
PacBell	2.4%	27.0%
Qwest*	27.9-28.6%	5.4%
SBC	15.6%	20.0%
Verizon (North)*	19.6-29.3%	10.9-11.2%
Verizon (South)	19.5%	31.5%

5 Year Term Commitment/10 mile circuit

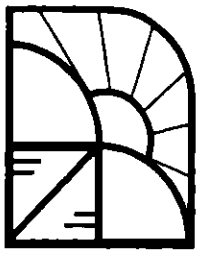
Rates vary by state

Special Access Rate Comparisons
Price Flex vs. Price Cap % Increases

	DS1	DS3
Ameritech*	0.4-1.2%	2.1-2.2%
BellSouth	19.0%	13.5%
PacBell	5.6%	15.8%
Qwest*	28.2-29.0%	5.4%
SBC	1.9%	1.8%
Verizon (North)*	19.6-29.3%	17.2%
Verizon (South)	23.3%	45.4%

Month to Month/10 mile circuit

Rates vary by state



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Phoenix Center Policy Paper Number 18:

Set It and Forget It? Market Power and the Consequences of Premature Deregulation in Telecommunications Markets

George S Ford, PhD
Lawrence J Spiwak, Esq.

(July 2003)

Phoenix Center Policy Paper No. 18
Set It and Forget It?
Market Power and the Consequences of Premature Deregulation in Telecommunications Markets

George S. Ford, PhD†
Lawrence J. Spiwak, Esq.‡

Abstract Fifty years ago, U S Supreme Court Justice Felix Frankfurter warned the Federal Communications Commission not to view "competition" in an "abstract, sterile way " To illustrate the dangers of using such an "abstract" approach to the key issue of ILEC market power, this paper uses the Commission's 1999 decision to de-regulate the prices for Special Access telecommunications services as a case study, wherein the Commission abandoned its own general framework for competition analysis in favor of using abstract notions of potential competition

As demonstrated herein, the Commission's deregulatory scheme for Special Access has produced *substantial* and *sustained* price increases for Special Access services where pricing flexibility is granted Based on the results of an econometric model, these price increases are found to be the consequence of ILEC market power rather than price adjustments reflecting costs The empirical model suggests that Special Access service is priced at about three times incremental cost, and this results is in line with other recent studies of market power in Special Access markets (*e g* , Rappoport, Taylor *et al* , 2003), which find that the Bells

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‡ President, Phoenix Center for Advanced Legal & Economic Public Policy Studies The views expressed in this paper are the authors' alone and do not represent the views of the Phoenix Center, its Adjunct Fellows, or any of its individual Editorial Advisory Board members.

receive a 40 percent return on Special Access revenues of $13 3 billion

This evidence suggests that while admittedly imperfect prognostications about competition and market power may be acceptable *ex ante*, continued agency review of incumbent market power is not only warranted, but virtually mandatory. Further, when abstract measures of competition are found, *ex post*, to be inadequate checks on market power such as in the case of Special Access services, the continued use of such abstractions by regulatory agencies should be immediately reviewed and potentially eliminated, particularly where such failure has a significant adverse impact on consumer welfare and a deleterious effect on U S telecoms competition and, by extension, the economy overall

The Commission's abstract approach to encouraging new entry and mitigating incumbent market power in the Special Access context should be a "canary in the coal mine" as to the consequences of using abstract notions of competition in the major rulemakings now pending before the Commission to facilitate Chairman Michael Powell's vision of a "digital migration" via so-called "inter-modal" competition Indeed, as the D.C Circuit recognized over twenty years ago· "Complex regulation must still be credible regulation" and any failure by the FCC to meaningfully enforce the Communications Act deprives "regulated entities, their competitors [and] the public of rights and economic opportunities without the due process the Constitution requires" Viewing competition in an abstract way failed miserably for Special Access services and this fact cannot be ignored in future proceedings at the FCC

U S consumers deserve far more than a perfunctory "Ron Popiel Chicken Rotisserie Oven - set it and forget it" approach to the very real problem of ILEC market power, lest the negative effects of Special Access deregulation be replicated in other markets While no doubt reducing its work load, the FCC simply cannot assume-away ILEC market power and, as Chairman Powell has recently attempted to do, eliminate it from the public lexicon altogether Instead, responsible public policy requires the Commission to return the core unresolved issue of incumbent

market power to center-stage and address it in an intellectually honest and definitive manner As such, it is incumbent upon the FCC to fulfill their core function under the Communications Act - *i e*, prevent dominant firms under their jurisdiction from gouging consumers and stymieing competition via the unfettered abuse of their market power

Equally as important, if the evidence suggests a regulatory failure to mitigate the incumbents' market power that produces clear adverse effects on U S consumer welfare and the economy, then we come back full circle regarding the FCC's overall analytical approach of how we should move from "one" to "many" - *i e*, given the obvious fact that the ILEC's can and will seek to exercise their market power to "deny, delay and degrade" new entry, then a more thorough look at the incumbents' market power by the Commission in the first instance is in order as the FCC attempts to facilitate Chairman Powell's vision of a "Digital Migration "

TABLE OF CONTENTS:

I. Introduction

Much has been spoken and written regarding the appropriate role of the Federal Communications Commission ("FCC") in the 21st Century. According to FCC Chairman Michael Powell, his vision of the Commission's role is to facilitate deregulation via a "digital migration,"[1] wherein so-called "inter-modal" competition will flourish to such a degree that the incumbent monopolists' market power will be constrained, stock prices will rise, and more jobs in the U.S equipment-manufacturing sector will be created.[2] For this reason, Chairman Powell has initiated several proceedings designed to accelerate this "digital migration," including, *inter alia*, the still un-released Triennial Review[3], a decision as to whether RBOC "broadband" services should be reclassified as "information services" under Title I of the Communications Act[4], a proceeding to evaluate the

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[1] Remarks of Michael K. Powell, Commissioner Federal Communications Commission Before The Progress & Freedom Foundation, *"The Great Digital Broadband Migration"* Washington, D.C. December 8, 2000 (http://www.fcc.gov/Speeches/Powell/2000/spmkp003.html), Michael K. Powell, Chairman Federal Communications Commission Press Conference October 23, 2001 [as prepared for delivery], *"Digital Broadband Migration" Part II* (http://www.fcc.gov/Speeches/Powell/2001/spmkp109.html), Remarks of Michael K. Powell, Chairman Federal Communications Commission at the Associated Press Annual Meeting and General Session of the Newspaper Association of America Annual Convention (April 28, 2003) (http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-233732A1.pdf)

[2] *See, e.g.*, February 26, 2003 Oral Statement of FCC Chairman Michael K. Powell Before the Subcommittee on Telecommunications and the Internet, Committee on Energy and Commerce, U.S. House of Representatives (http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-231377A1.pdf), Remarks of Michael K. Powell, Chairman Federal Communications Commission at the Goldman Sachs Communicopia XI Conference New York, NY October 2, 2002 [as prepared for delivery] (http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-226929A1.pdf), *see also* February 26, 2003 Written Statement of FCC Commissioner Kathleen Q. Abernathy Before the Subcommittee on Telecommunications and the Internet, Committee on Energy and Commerce, U.S. House of Representatives (http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-231535A2.pdf)

[3] *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers* (CC Docket No. 01-338), *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996* (CC Docket No. 96-98), *and Deployment of Wireline Services Offering Advanced Telecommunications Capability* (CC Docket No. 98-147), __ FCC Rcd __ (adopted 20 February 2003), *see also* PHOENIX CENTER POLICY BULLETIN NO. 3 *The Broadband Loophole - Is Symmetrical Regulation in the Face of Asymmetrical Market Power Good Public Policy?* (19 March 2003) (http://www.phoenix-center.org/PolicyBulletin/PolicyBulletinNo3.pdf)

[4] *In re Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services*, Notice of Proposed Rulemaking, FCC 01-360, __ FCC Rcd __ (rel. December 20, 2001).

appropriate regulatory framework for RBOC and ILEC in-region long-distance service outside of a separate affiliate,[5] and potentially even a proceeding to revisit the appropriateness of Total Element Long-Run Incremental Costs (TELRIC) pricing altogether

It is generally accepted that some degree of "workable" competition is a necessary prerequisite to deregulation,[6] and this prerequisite is often difficult to satisfy given the ubiquity and magnitude of barriers to entry to the telecoms industry (*e g*, necessity of committing significant sunk costs, asymmetrical regulation, *etc*) With the concept of "inter-modal competition," where differentiated services supplied using dissimilar technologies (*e g*, wireless and wireline telephony) are considered close substitutes based on little more than theoretical oversimplifications, the Commission's view of competition is becoming increasingly abstract This abstraction from measurable and discernable competitive forces is not limited to telecommunications, but has allowed for rapid and unprecedented economic concentration in the media industry [7]

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[5] *In re Section 272(f)(1) Sunset of the BOC Separate Affiliate and Related Requirements*, Further Notice of Proposed Rulemaking, FCC 03-111, __ FCC Rcd __ (rel May 19, 2003) Among other things, what makes this NPRM so incredulous is that the Commission – citing to the presence of so-called inter-modal competition such as "Internet-based applications (*e g*, instant messaging, email)" (*id* at ¶ 8) – is seeking comment on whether the RBOCs should be re-classified as non-dominant carriers for in-region inter-LATA service, even in the absence of structural safeguards in the form of separate affiliates, when the cornerstone of the FCC's original and successful *Competitive Carrier* paradigm was the preventing dominant firms who own and control of "bottleneck" – *i e*, "last mile" access facilities – from exercising their market power *In re Policy and Rules Concerning Rates for Competitive Common Carrier Services and Facilities Authorizations Therefore*, Docket No 79-252, 85 FCC 2d 1 (1980) As the Commission recognized over twenty years ago, a dominant firm can exercise market power when it has "sufficient command over some essential commodity or facility in its industry or trade to be able to impede new entrants Thus, bottleneck control describes the structural characteristics of a market that new entrants must either be allowed to share the bottleneck facility or fail" *Id* ¶ 59 For this precise reason, the Commission held that control of bottleneck facilities was "*prima facie* evidence of market power requiring detailed regulatory scrutiny" *Id* at 58

[6] *See, e g*, *In re Competition in the Interstate Interexchange Marketplace*, 6 FCC Rcd 5889 (1991)(IXC Rulemaking Order), *In re Revisions to Price Cap Rules for AT&T Corp*, Report & Order, FCC Docket No 95-18 (rel 12 January 1995), *In re Motion of AT&T Corp to Be Reclassified as a Non-Dominant Carrier*, FCC 95-427, 11 FCC Rcd 3271 (rel Oct 23, 1995)

[7] William Safire, *The Great Media Gulp*, NEW YORK TIMES (22 May 2003) ("The concentration of power – political, corporate, media, cultural – should be anathema to conservatives The

(Footnote Continued)

The increasingly obvious disconnect between (de)regulatory policy and rigorous market power analysis ignores U S Supreme Court Justice Felix Frankfurter's fifty year-old warning to the Commission not to view "competition" in an "abstract, sterile way "[8] Indeed, policies implemented by relying exclusively on textbook notions of competition and regulation in an industry with traits incompatible with such naive theories fails to satisfy the Commission's statutory mandate Further, the Commission must not ignore the effects of its decisions on consumers and social welfare Thus, the current Commission's preoccupation with maximizing industry inputs (*e g* , jobs and the sales of equipment from vendors) rather than the efficient production and distribution of industry output (*i e.,* leading to declining prices, more innovation) is misplaced While the notion of the ILECs' "market power" has disappeared from the FCC's lexicon today[9], the sustainability of this philosophical stance is dubious given the inevitable review of its decisions by a panel perhaps less dogmatic than Chairman Powell In other words, deregulation by the FCC requires a thorough inquiry as to whether there are sufficient regulatory safeguards and/or competition to constrain the incumbents' market power under current market conditions (thereby allowing the regulator to forbear from its authority to "manage" market forces[10]) Further, given the dynamic nature of the telecoms industry, the Commission should examine and monitor the impacts the decisions the FCC makes today (and in the past) on the long-term performance of the industry as a whole [11]

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diffusion of power through local control, thereby encouraging individual participation, is the essence of federalism and the greatest expression of democracy ")

[8] *FCC v RCA Communications, Inc* , 346 U S 86, 93-95 (1953)

[9] *See supra* nn 1-2

[10] Some argue, sometimes convincingly, that unregulated monopoly is an improvement over regulated monopoly *See e g* , M L Spitzer & T W Hazlett, PUBLIC POLICY TOWARDS CABLE TELEVISION THE ECONOMICS OF RATE CONTROL (1998)

[11] *See, e g , Verizon v FCC*, 122 S Ct 1646, 1661 (2002) ("For the first time, Congress passed a ratesetting statute with the aim not just to balance interests between sellers and buyers, but to reorganize markets by rendering regulated utilities' monopolies vulnerable to interlopers "), *see also Town of Concord v Boston Edison Co* , 915 F 2d 17, 22 (1st Cir 1990) (Breyer, J), *cert denied*, 111 S Ct 1337 (1991) ("After all, should the regulator decide that new entry is warranted, it typically has the legal authority to prevent an existing 'two- level' monopolist from improperly disadvantaging a new 'second-level' competitor by, say, refusing to deal to with it or by charging unreasonably high prices "), Walter G Bolter *et al* , TELECOMMUNICATIONS POLICY FOR THE 1980'S THE TRANSITION TO COMPETITION (Prentice Hall 1984) at 359-60

Understanding that this daunting task is easier said than done, particularly as administrative decision-making is a political process with political pressures for action,[12] the courts consistently hold that the FCC need not meet a "standard of perfection" or to "identify the optimal threshold with pinpoint precision" when promulgating its rules, but, if the Commission is going to depend on predictive forecasts, then the FCC must "identify the standard and explain its relationship to the underlying regulatory concerns."[13] The foregoing statement of law also raises a corollary but unanswered question – *i e*, if the Commission, as the expert agency, is entitled to such great deference and latitude in implementing the provisions of the Communications Act, *then doesn't the Commission* a fortiori *also have a subsequent responsibility to monitor the consequences of its regulatory actions, particularly when it publicly admits that its regulatory actions are based on prognostications and imperfect measures of competition?* As explained below, the obvious answer is "yes," particularly when the Commission's prognostications are based *ex ante* on flawed theory and can be shown *ex post* to be incorrect

To illustrate the dangers of using such an "abstract" approach to the key issue of ILEC market power, we will use as a case study the Commission's 1999 decision to de-regulate the prices for Special Access telecommunications services, where the Commission abandoned its own general framework for competition analysis in favor of using crude indicators of potential competition That is to say, the Commission's deregulatory scheme for Special Access, which relied on abstract measures of competition, has produced *substantial* and *sustained* price increases for Special Access services where pricing flexibility is granted. Based on the results of an econometric model, these price increases are found to be the consequence of ILEC market power rather than price adjustments reflecting costs This evidence suggests that while imperfect prognostications may be acceptable *ex ante*, it would seem that when an administrative agency repeatedly admits to such imperfection, continued agency review of incumbent market power is nonetheless warranted Further, and perhaps more important, when abstract measures of competition are found, *ex post*, to be inadequate checks on market power such as found in the case of Special Access services, the continued

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[12] *Cf United States v FCC*, 652 F 2d 72, 90- 91 (D C Cir 1980) (en banc) ("Someone must decide when enough data is enough In the first instance that decision must be made by the Commission To allow others to force the Commission to conduct further evidentiary inquiry would be to arm interested parties with a potent instrument for delay ")

[13] *See, e g , WorldCom v FCC*, 238 F 3d 449, 461-62 (D C Cir 2001)

use of such abstractions by regulatory agencies should be immediately reviewed and potentially eliminated, particularly where such failure has a significant adverse impact on consumer welfare and a deleterious effect on competition in the U S telecommunications industry and, by extension, the economy overall

Our analysis proceeds as follows In Part II, we describe the FCC's philosophical and analytical approach to de-regulating Special Access services, with particular attention paid as to how the FCC approached the key issue of ILEC market power and market definition, as well as to why the D C Circuit upheld the Commission's rulemaking as lawful even though it found its policy decisions questionable In light of the Commission's recent decision in its Triennial Review of the unbundling obligations removed from the list of unbundled elements some high capacity circuits, thus preventing entrants from purchasing such circuits in many markets at cost-based prices,[14] an analysis market power over Special Access services is particularly timely [15]

In Part III, we then specify an empirical model to estimate the extent to which the near ubiquitous price increases for Special Access services in deregulated markets can be attributed to market power rather than costs This exploratory empirical analysis suggests that the vast majority of observed price increases in deregulated markets can be credited to the increased exercise of market power, with cost variation contributing little to price increases

Finally in Part IV, we conclude by examining briefly the legal and policy implications of the Commission's approach to ILEC market power in the Special Access context, with a focus on pending and future proceedings at the agency As explained below, a key lesson can be learned from the Commission's de-regulation experience for Special Access - *i e*, although the Commission may rely on theoretical concepts of competition as a substitute for a rigorous analysis of market power to develop the initial parameters of a regulatory paradigm, it does not *a fortiori* mean that the Commission can abrogate its statutory obligation under the Communications Act to monitor the subsequent consequences of its

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[14] *See supra* n 3

[15] *C f* Mark Naftel and Lawrence J Spiwak, THE TELECOMS TRADE WAR THE UNITED STATES, THE EUROPEAN UNION AND THE WTO (Hart Publishing 2001) at 207 (the "FCC found that most CLECs had more success reselling selling specialized services, such as Special Access and local private line services, than they have had selling basic switched local service to end users In other words, `they bleed red ink'")

regulatory actions on the market As such, we come back full circle, because if the evidence suggests a regulatory failure, then perhaps a more thorough look at the incumbents' market power in the first instance would have been in order

II. *Case Study:* Examining The Commission's Deregulatory Paradigm for Special Access

A *What is Special Access?*

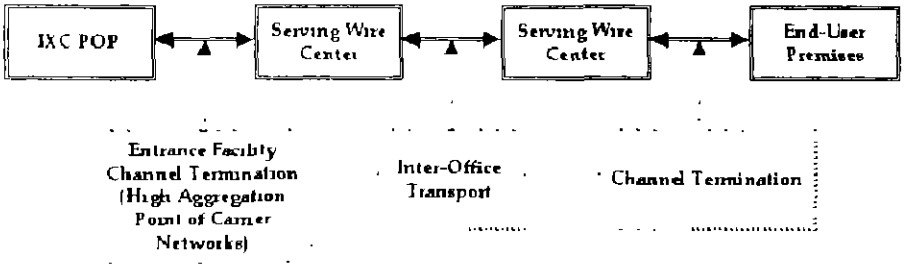
Special Access is the backbone of the telecommunications network These high capacity circuits – such as DS-0, T-1, DS-1, DS-3, and OC-N lines – are used to transport traffic between major interconnection points of the network (*e.g.*, switches, routers, *etc.*) and between such points and end-users [16] Special Access services are typically priced as three components: (1) channel terminations, (2) interoffice transport, and (3) entrance facilities [17] Channel terminations are the facilities between an ILEC serving wire center and an end-user customer Interoffice transport consists of the facilities connecting various ILEC serving wire centers, and entrance facilities connect interexchange carriers' or CLECs' point(s) of presence (POP) and the ILEC's serving wire center Each of these

[16] The T-carrier system, introduced by the Bell System in the U S in the 1960s, was the first successful system that supported digitized voice transmission The original transmission rate (1 544 Mbps) in the T-1 line is in common use today in Internet service provider (ISP) connections to the Internet Another level, the T-3 line, providing 44 736 Mbps, is also commonly used by Internet service providers Another commonly installed service is a fractional T-1, which is the rental of some portion of the 24 channels in a T-1 line, with the other channels going unused Digital signal X is a term for the series of standard digital transmission rates or levels based on DS0, a transmission rate of 64 Kbps, the bandwidth normally used for one telephone voice channel Both the North American T-carrier system and the European E-carrier systems of transmission operate using the DS series as a base multiple The digital signal is what is carried inside the carrier system DS0 is the base for the digital signal X series DS1, used as the signal in the T-1 carrier, is 24 DS0 (64 Kbps) signals transmitted using pulse-code modulation (PCM) and time-division multiplexing (TDM) DS2 is four DS1 signals multiplexed together to produce a rate of 6 312 Mbps DS3, the signal in the T-3 carrier, carries a multiple of 28 DS1 signals or 672 DS0s or 44 736 Mbps Digital signal X is based on the ANSI T1 107 guidelines *Source* searchNetworking com

[17] In the special access context, entrance facilities are also called "channel terminations" We use "entrance facilities" here to distinguish those channel terminations that provide the end user connection from those that provide the connection between carrier networks

components can have mileage charges, and interoffice transport almost always does [18]

Illustration No. 1



B *The 1999 Pricing Flexibility Order*

In 1990, ILECs were required to geographically average the prices for Special Access services across geographic markets Subsequently, the Commission granted limited pricing flexibility – including de-averaging and volume and term discounts - provided there was at least some evidence of competition in the rate zone or study area [19]

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[18] For a more thorough description, *see In re Access Charge Reform*, Fifth Report and Order and Further Notice of Proposed Rulemaking, ___ FCC Rcd ___, FCC 99-206 (rel 27 Aug 1999) at ¶¶ 8-10 (*Pricing Flexibility Order*)

[19] *Expanded Interconnection with Local Telephone Company Facilities, Amendment of the Part 69 Allocation of General Support Facility Costs*, CC Docket Nos 91-141 and 92-333, Report and Order, 7 FCC Rcd 7369, 7454 n 411 (1992) (*Special Access Expanded Interconnection Order*), *vacated in part and remanded, Bell Atlantic Tel Cos v FCC*, 24 F 3d 1441 (D C Cir 1994), *Expanded Interconnection with Local Telephone Company Facilities*, 9 FCC Rcd 5154, 5158, 5196 (1994) (*Virtual Collocation Order*) ("Expanded interconnection" refers to the interconnection of one carrier's circuits with those of a LEC at one of the LEC's wire centers so that the carrier can provide certain facilities-based access services), *Switched Transport Expanded Interconnection with Local Telephone Company Facilities*, CC Docket No 91-141, Second Report and Order and Third Notice of Proposed Rulemaking, 8 FCC Rcd 7374, 7425-32 (1993) (*Switched Transport Expanded Interconnection Order*) (An expanded interconnection offering is deemed "operational" when at least one interconnector has taken a switched cross-connect element), *aff'd, Virtual Collocation Order*, 9 FCC Rcd 5196

In 1999, the FCC released its *Pricing Flexibility Order* in order to allow, *inter alia*, "incumbent LECs progressively greater pricing flexibility [for Special Access services] as they face increasing competition "[20] Used often by the Commission, limited pricing flexibility is a mechanism that deregulates narrow portions of a dominant firm's business as it presumably becomes competitive without having to deregulate the entire firm [21]

In its *Pricing Flexibility Order*, the Commission established two phases (Phase I and Phase II) of pricing flexibility for Special Access services Under Phase I, the Commission would allow the ILEC to provide volume and term discounts of current rates or enter into contract tariffs,[22] while Phase II pricing flexibility would removed the ILEC from price cap regulation altogether [23]

To obtain Phase I pricing flexibility under the Commission's regulations, a price cap LEC must show that in each Metropolitan Statistical Area (MSA) competitors unaffiliated with the price cap LEC have collocated.

(1) In fifteen percent of the petitioner's wire centers, and that at least one such collocator in each wire center is using transport facilities owned by a transport provider other than the price cap LEC to transport traffic from that wire center, or

(2) In wire centers accounting for 30 percent of the petitioner's revenues from dedicated transport and Special Access services other than channel terminations between LEC end offices and customer premises, determined as specified in Sec 69 725 of this part, and that at least one such collocator in each wire center is using transport facilities owned by a transport provider other than the price cap LEC to transport traffic from that wire center [24]

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[20] *Pricing Flexibility Order, supra* n 18 at ¶ 67

[21] *See, e g , In re Competition in the Interstate Interexchange Marketplace*, 6 FCC Rcd 5889 (1991)(IXC Rulemaking Order), *In re Revisions to Price Cap Rules for AT&T Corp* , Report & Order, FCC Docket No 95-18 (rel 12 January 1995), *Policy and Rules Concerning Rates for Dominant Carriers*, CC Docket No 87-313, Second Report and Order, 5 FCC Rcd 6786, 6818-20 (*LEC Price Cap Order*)

[22] *See* 47 C F R § 69 727 (a)

[23] *See* 47 C F R § 69 727 (b)

[24] *See* 47 C F R § 69 709(b) *et seq*

For channel terminations, a stricter standard is applied given that entry costs for channel terminations are higher Phase I relief for channel terminations requires collocations in 50 percent of wire centers or in wire centers accounting for 65 percent of revenues

The standards for Phase II pricing flexibility are nearly identical except that non-affiliated carriers must have collocated in 50 percent of the petitioner's wire centers or in wire centers accounting for 65 percent of the petitioner's revenues from dedicated transport and Special Access services other than channel terminations between LEC end offices and customer premises [25] Phase II flexibility requires a higher "competition" standard than Phase I, since the ILEC can remove services sold in such markets from price cap regulation, whereas Phase I flexibility retains price caps but allows the ILEC to provide volume and term discounts of current rates or enter into contract tariffs [26] Consumers can continue to purchase Special Access services at price-cap rates with Phase I relief, but this option is eliminated with Phase II relief

The deregulatory paradigm for Special Access services established by the Commission consists of (at least) two primary components relevant to an economic and legal analysis First, the Commission defined the geographic market over which flexibility is granted as an MSA MSAs are rather large geographic areas that extend well beyond the core population and business density of the cities contained therein Second, pricing flexibility is not granted in response to a reduction in market power, but in response to the number of central offices in which at least one competitor has collocated While measurable, collocation is not necessarily related in a meaningful way to the extent of competition, so the Commission's deregulatory framework relies on a highly indirect measure of competition Both features of the Commission's paradigm – large geographic markets and indirect measures of competition - create the potential for market power to be exercised by incumbent firms Whether or not this potential is realized is an empirical question, which we turn to in Section III

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[25] *See* 47 C F R § 69 709(c) *et seq*

[26] *See id* nn 22-25

1 *The FCC's Approach to Defining the Appropriate Geographic Market for Analysis*

According to the Commission, the relevant geographic market for regulatory purposes should be defined "narrowly enough so that the competitive conditions within each area are reasonably similar, yet broadly enough to be administratively workable."[27] Agreeing with the ILECs,[28] the Commission chose Metropolitan Statistical Areas or "MSAs"[29] as the relative geographic area for purposes of analysis because, reasoned the Commission, MSAs are a "logical basis for measuring the extent of competition" as MSAs "best reflect the scope of competitive entry."[30] Entrants, however, contested the notion that MSAs coincide with the scope of competitive entry, arguing that the geographic-specificity of telecommunications plant tends to support small geographic markets.[31] While the Commission recognized that telecommunications investment is "largely specific to a location," it did not place substantial weight on this fact when selecting market boundaries.[32]

Both wider and narrower market boundaries were proposed, including statewide and central office specific boundaries (among others). Limiting the market to central offices was rejected on administrative grounds, with the Commission arguing that "defining geographic areas smaller than MSAs would force incumbents to file additional pricing flexibility petitions and, although these petitions might produce a more finely-tuned picture of competitive conditions, the record does not suggest that this level of detail justifies the increased expenses and administrative burdens associated with" such a definition.[33] Conversely, the Commission believed that providing state-wide pricing flexibility would "increase the likelihood of exclusionary behavior by incumbent LECs by giving them flexibility in areas where competitors have not

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[27] *Id.* at ¶ 71

[28] *Id.* at n. 196

[29] *See* 47 C.F.R. § 22.909(a)

[30] *Pricing Flexibility Order* at ¶ 72

[31] *Id.* at ¶ 74 ("CTSI and KMC suggest that competition may exist in only a small part of an MSA")

[32] *Id.* at 81

[33] *Id.* at ¶ 74

yet made irreversible investments in facilities "[34] The Commission also recognized that its MSA definition potentially presented the same problem and might "lead to higher rates for access to some parts of an MSA that lack a competitive alternative "[35]

Selecting market boundaries turned on the tradeoff between the risk of increased market power in some parts of the market and the costs of administering a deregulatory paradigm (for both the Commission and the ILECs)[36] Presumably, administrative costs rise as the size of the market falls, thereby increasing the number of markets and requiring more numerous applications for flexibility The Commission believed that the MSA was appropriate because administrative costs were reasonable and its triggers were "sufficient to preclude the incumbent from exploiting any monopoly power over a sustained period "[37] If, however, market power is observed under the Commission's deregulatory paradigm, then either the Commission's triggers are

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[34] *Id* at ¶ 72

[35] *Id* at ¶ 142 (emphasis supplied) The problem with overly broad market definitions is usefully evaluated using the economic theory of fragmented competition To illustrate the concept, consider a simple example Suppose there are two islands, A and B On Island A, both firms 1 and 2 offer "Special Access" services to end users, but only Firm 1 offers service on Island B Island A is a contested or competitive market, whereas Island B is a monopoly Economists refer to this competitive scenario as fragmented duopoly or fragmented competition Basu, K & Bell, C *Fragmented Duopoly Theory and Applications to Backward Agriculture*, JOURNAL OF DEVELOPMENT ECONOMICS, 36, 145-165 (1991), Beard and Ford (2003), Beard, Ford, Hill, and Saba (2003) The most interesting case of fragmented competition is when firms are required to offer services at the same price across the two segments (or islands) Firm 2, providing service only on Island A, behaves in a traditionally duopolistic fashion since its entire market is contested Alternately, Firm 1, serving both contested and captured segments, must consider the implications from both markets when setting its single price A cross-market balancing act by Firm 1 renders an equilibrium price that lies between the monopoly and competitive (duopolistic) price *Importantly*, if prices can differ between islands, then the two islands are treated independently by Firm 1 with the monopoly price prevailing in the captured segment (Island B) and the competitive price prevailing in the contested segment (Island A) Firm 1's profits are higher if it can price discriminate across markets, so Firm 1 prefers to segment the two markets Oddly, despite the ability to exercise market power, segmenting the market was viewed as desirable by the Commission "incumbent LECs are no longer required to choose between lowering a rate throughout the area at issue or not lowering the rate at all " *Id* at ¶ 122

[36] Lawrence J Spiwak, *What Hath Congress Wrought? Reorienting Economic Analysis of Telecommunications Markets After the 1996 Act*, ANTITRUST (Spring 1997) at 33-34

[37] *Pricing Flexibility Order, supra* n 18 at ¶ 141

inadequate indicators of competition or its market boundaries are too wide (or both) [38]

One distinction between Phase I and II relief with respect to market definition is worth discussing With Phase I relief, a customer can continue to purchase Special Access services at regulated (price cap) prices This option is eliminated with Phase II relief Because the administrative costs of price caps are incurred regardless of Phase I or Phase II relief (until, at least, all markets receive Phase II relief), the price-cap ceiling in Phase I markets is a very low cost stopgap measure against the exercise of market power in those markets Why the Commission did not maintain this stopgap measure in Phase II markets is unclear, though probably related to the desire to completely deregulate prices However, given the shaky competitive standards relied upon to deregulate this market and the failure to perform a market power analysis, the price-cap stopgap measure may have been a reasonable component of Phase II relief This stopgap should have no effect on the ILECs' incentive to cut price Unless Special Access circuits in different markets or areas of single market are substitutes or compliments in demand, the inability to raise price for some customers should not affect the decision to lower prices for others [39] Therefore, downward price pressures should be unaffected by a price-cap ceiling on rates

2 *Sunk Costs as a Proxy for Competition*

Perhaps the most puzzling aspect of the Commission's deregulatory paradigm is the decision to measure the extent of competition and the prospects for entry by the degree to which entry requires sunk costs [40] While economic theory does suggest that sunk investments represent a commitment by entrants thereby reducing the expected success of predatory actions by incumbent firms,

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[38] In contrast to its wide geographic market boundaries for high capacity circuits in the pricing flexibility context, for high capacity unbundled network elements ("UNEs") the Commission recently defined the relevant market for similar services on a point-to-point basis (*e g*, between two central offices or perhaps between two city-pairs) in their Triennial Review *See supra* n 3

[39] *See* Jean Tirole, THE THEORY OF INDUSTRIAL ORGANIZATION (1995) at p 70 Prices also may be related across markets or areas if the marginal costs of providing the different services are related

[40] *See, e g, Pricing Flexibility Order* at ¶ 94 ("we conclude that it is appropriate to give incumbent LECs pricing flexibility when competitors have made irreversible, sunk investment in facilities")